## **ABSTRACT OF THE DISCLOSURE**

A microsensor for detecting corrosive media acting on a bulk metallic material when mounted in situ adjacent a location in the bulk metallic material. The microsensor includes a plurality of corrosive tracks (16; 132; 216B) exposed to the corrosive media, each said corrosive track being formed as a patterned conductive thin film track. The tracks follow serpentine paths which include a plurality of bends, at least two of which are of opposite curvature, to provide a high degree of miniaturisation coupled with accurate and reliable corrosion sensing characteristics. The corrosive tracks may be formed from an alloy material, such as an aluminium alloy, to mimic the corrosive characteristics of a bulk metallic alloy and to provide improved corrosion detection for components made from such materials at high degrees of miniaturisation.

[Fig. 1]